



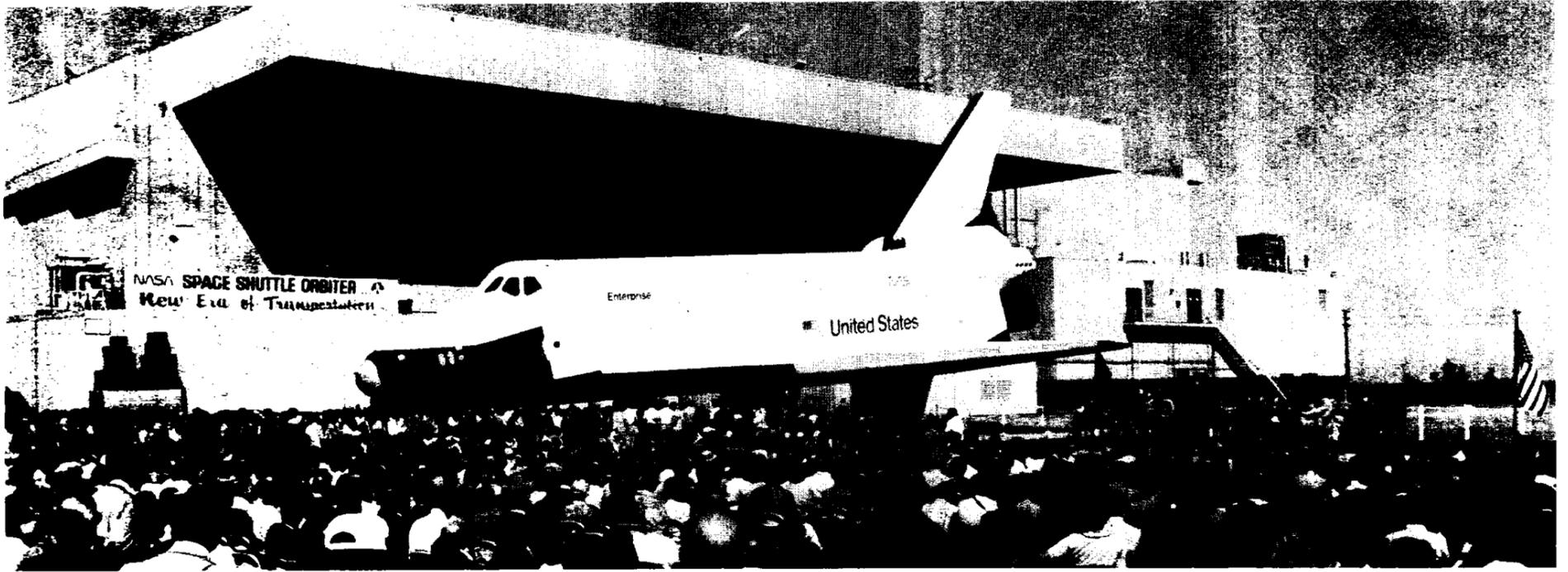
ROUNDUP

NASA LYNDON B. JOHNSON SPACE CENTER

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Friday, September 24, 1976



Orbiter Vehicle 101, christened the Enterprise, rolls out for public view in Palmdale, Calif., as hundreds look on.

NASA displays first Shuttle Orbiter Hundreds view Enterprise in Palmdale, Calif.

The Space Shuttle "is probably the best investment the United States Congress has ever made," U.S. Sen. Barry M. Goldwater said in Palmdale, Calif., Sept. 17.

Goldwater was speaking before hundreds of guests at the official roll-out ceremonies for Orbiter 101 — the first reusable Space Shuttle vehicle.

"We are on the verge of a new era," the senator said. "The Space Shuttle will present us a remarkable opportunity to explore the new frontier of space for the benefit of all mankind."

Goldwater was one of several

dignitaries who spoke at the unveiling of the Enterprise — the name chosen for the Orbiter by President Ford.

Keynote remarks were made by NASA Administrator Dr. James C. Fletcher, who called the event "a very proud moment" for the agency.

"With the Space Shuttle Program, Americans and the people of the world have made the evolution to man in space — not just astronauts," he said.

The administrator noted that while Shuttle crews must meet rigorous standards, "passengers can

qualify with normal good health."

Shuttle is "the natural progression" of all our space programs and insures that "man has entered the environment of space permanently," Fletcher said.

This reusable transportation system, which combines the best features of spacecraft and aircraft, "will carry the technology of many countries to benefit this nation and all the nations of the world," the NASA administrator concluded.

U.S. Rep. Olin E. Teague of Texas, chairman of the U.S. House Committee on Science and Technology, told the group:

"Today marks a major milestone in our space program. This is the first in a fleet of space vehicles which will enable us ... to greatly enhance life here on Earth."

Teague praised both government and industry efforts for making possible, for the first time, "low cost, routine access to space."

The roll-out program was opened by John F. Yardley, associate NASA administrator for the Office of Space Flight, who acted as master of ceremonies.

U.S. Sen. John V. Tunney welcomed the guests to California. He called the Shuttle "the gem of American space exploration for the next decade" and noted the practicality as well as the "challenge and adventure" of the program.

Following a local welcome by U.S. Rep. William Ketchum, special guests were introduced.

These included from JSC, Direc-

tor Dr. Christopher C. Kraft Jr., program officials Robert F. Thompson, Aaron Cohen and Donald K. "Deke" Slayton, and ALT crewmen Fred W. Haise, Joe H. Engle, Charles G. Fullerton and Richard H. Truly.

In a lighter moment during the ceremonies, Goldwater made reference to the *Star Trek* television series in which there was a starship called Enterprise and a main character named Spock with an unusual physical characteristic.

"I'll make one prediction," the senator said, "that there will be a great demand for a new kind of astronaut — one with pointed ears."

The *Star Trek* influence on the ceremony was also evident when the Air Force Band of the Golden West began playing the show's theme music after the Orbiter was rolled into view of the crowd.

Clear skies, cameras set scene of roll-out

By Terry White

Smog and drizzle had threatened for several days to spill over the San Gabriels into the high desert from the Los Angeles basin, but on roll-out morning the weather at Palmdale was ideal — clear, light wind and comfortably warm.

Three-level workstands had been pressed into service as camera platforms for still, motion picture and television cameramen behind the invited guest seating area. Others of the 185 newsmen covering the roll-out sat in the press section near where Orbiter 101 came to a halt behind a star-spangled tractor.

Nearby, the reentry-smudged Apollo 14 command module sat on a dolly as a link in the evolution of

spacecraft.

When all the speeches were over and the band had packed away the instruments, Orbiter 101 became a backdrop for hundreds of you-take-my-picture, I'll-take-yours tableaux.

The scene was repeated the following day on a much larger scale as Orbiter was rolled out of the hangar again and parked on the ramp for the general public and for Rockwell International employees.

Back toward Palmdale, work crews were already relocating telephone poles and Joshua trees in preparation for the overland move of Orbiter 101 from Palmdale, 35 miles to Dryden Flight Research Center in January.



STAR TREKERS — Gene Rodenberry, second from right, creator of the science-fiction television series *Star Trek*, is flanked by members of the show's cast who were on hand for the unveiling of the Space Shuttle Orbiter. The name chosen

by President Ford for the Orbiter, the Enterprise, was the name of the starship in Rodenberry's series. Actor Leonard Nimoy, third from right, portrayed Mr. Spock, the pointed-eared alien who became the show's most famous character.

Center commends spokesmen



Richard Underwood

Leo F. Childs



Dr. W. Richard Downs



agricultural community.

Childs specializes in speaking to farming, conservation, forestry, water development and flood control organizations. He addressed 12 groups and about 2,800 people during FY 1976.

Over the past three years, the three award winners have represented NASA before a total of 325 groups.

Most of their appearances have been in Texas, Oklahoma, New Mexico, Colorado, Kansas, Nebraska, South Dakota and North Dakota, the eight states primarily covered by the Speakers Bureau, Bureau Head Charles J. Bauer Jr. said.

Occasionally, special requests have taken the speakers to other states.

Bauer noted that the Speakers Bureau receives at least 300 off-site speaker requests per year, of which more than 90 percent are filled.

Highest JSC award given 3 speakers

Three employees who have spoken about the space program to hundreds of groups across the country have been given JSC's highest award in recognition of their efforts.

Center Director Dr. Christopher C. Kraft Jr. presented the Certificate of Commendation, Sept. 10, to Richard W. Underwood, Dr. W. Richard Downs and Leo F. Childs.

All three men have volunteered their services for several years through the JSC Speakers Bureau.

Underwood, technical assistant to the chief of the Photographic Technology Division, addressed 63 groups and approximately 16,500 people during fiscal year 1976.

Underwood's certificate cited "his outstanding contributions to the space program by his highly effective presentation of space photography to the general public and the educational community."

Downs, assistant for special projects in the Structures and Mechanics Division, was recognized for his presentation of the benefits of space.

He spoke during FY 1976 to 40 groups consisting of approximately 10,600 people.

Childs, special assistant to the chief of the Earth Observations Division, was cited for his presentation on the Earth Observations Program to the general public and the



RED HOT AND BARE-HANDED — The glowing cube of silica, fresh from a 2300 degrees F oven, provides the only light in this photograph as a technician holds it in his bare hand. The demonstration illustrates the remarkable speed at which heat is cast off by the unique silica insulation being manufactured by Lockheed for the Shuttle Orbiter.

Orbiter insulation production begins

Shuttle Orbiters will be heat shielded with an insulation so efficient it can be held with bare hands while red hot.

The material dissipates heat so quickly it can be taken from a 2300 degrees Fahrenheit kiln and immediately immersed in cold water without damage.

Lockheed Missiles and Space Co. officially opened a facility in Sunnyvale, Calif., Sept. 15, to manufacture the unique, all-silica insulation which is refined from common sand.

Nearly 34,000 "tiles" of the material will be used to cover about 70 percent of each Orbiter's surface.

The tiles, designated LI-900, are expected to survive temperatures up to 2300 degrees F for 100 flights with only minor maintenance. It is this durability that makes the Shuttle a truly reusable space transportation system.

Each LI-900 tile will be precisely milled to match the curvature of the Shuttle's surface at the exact point at which it is to be attached.

This reduces overall weight and assures aerodynamic smoothness but also means no two tiles in a shipset are exactly alike.

In addition, tiny gaps must be left between tiles to allow air inside to escape on orbit. Those gaps must

be uniform to within 2 one-hundredths of an inch.

All this makes the task of fitting tiles together on the spacecraft's skin somewhat like assembling an enormous three-dimensional jigsaw puzzle on a surface about twice the size of a basketball court.

Two different types of coatings will be applied to the tiles. For the Shuttle's underside and some small topside areas where temperatures will reach 1200-2300 degrees F, a black reaction-cured glass coating will be used. For other areas in the 600-1200 degrees F range, a white silica compound coating will be applied.

Fund set up in memory of Ted Skopinski

Ted H. Skopinski, 56, Shuttle Payload Integration and Development Program Office, died Thursday, Sept. 16.

Services were held Monday at St. Paul's Catholic Church, Nassau Bay, with burial following at Forest Park East Cemetery, League City.

A Clear Lake High School scholarship fund has been established in Skopinski's name at the request of the family. For information, contact John O'Loughlin, X-5321.

Second Shuttle trainer arrives

The second of two Shuttle Training Aircraft (STA), to be used in training Shuttle pilots, was delivered to JSC, Sept. 15. The first arrived June 8.

The modified Grumman Gulfstream II twin-engine jet aircraft

was flown to Ellington AFB from the Grumman plant in New York.

The STA aircraft will simulate Shuttle Orbiter handling qualities, performance characteristics, and flight control procedures during the subsonic atmospheric flight phase

from 35,000 feet altitude to simulated Orbiter touchdown.

This flight profile is accomplished through the independent control of six-degrees of freedom, effected with the use of normal Gulfstream II control surfaces as well as auxiliary direct lift, side force control surfaces, and in-flight reverse thrust.

The motions of these surfaces are commanded by an on-board digital computer with a model-following technique.

To do this, the full six-degree of freedom Orbiter equations of motion are mechanized within the digital computer. The STA responses to the simulation pilot commands are compared with those of the Orbiter, and the STA control surfaces are driven to eliminate response differences. The STA is consequently forced to follow the Orbiter model.

The simulation pilot occupies the left side of the STA cockpit, which incorporates Orbiter flight instruments and controls. An instructor pilot occupies the right seat, which is equipped with standard Gulfstream II controls and instruments.

The simulation pilot will normally have control of the STA during training exercises, but the instructor pilot can assume control at any time by depressing a single disengage switch.

Elsie Johnson named Outstanding Secretary

Elsie F. Johnson, secretary to the chief, Mission Operations Branch, Flight Control Division, has been selected JSC Outstanding Secretary for September.

Johnson was nominated for the award by John O'Neill, former acting chief. David Schultz is now branch chief.

"Her abilities to produce accurate and rapid work output coupled with her exceptional sense of priority allow her to assume more responsibility in assisting the engineers...with flight critical documentation," O'Neill said.

Johnson "has never failed to respond to the challenge of added mission workload, and during Skylab...she worked in the mission control center with terminal interface to a software system to retrieve and properly store critical mission data," he noted.

O'Neill also cited Johnson's exceptional talents and innovative ap-

proach to her job and said, finally, she "is an all-around top notch secretary because she works hard at it. By enjoying her work she makes it easy for those around her to enjoy doing their work."



Elsie Johnson

ROUNDUP



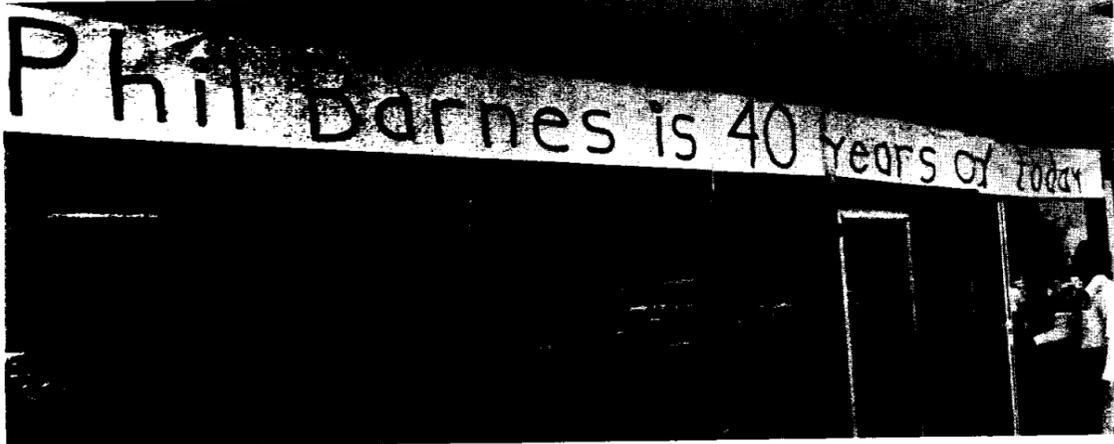
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Photographer: A. "Pat" Patnesky



AND YE SHALL KNOW THE TRUTH — There was no escaping the facts, Sept. 13, for Phil Barnes, right, section head in the Operations Integration Branch, Ground Data Systems Division. Barnes' co-workers made certain that

everyone who entered the north door of Bldg. 30 knew that Phil was celebrating (or should that be trying to forget) his 40th birthday.

Schweickart gets new Hq job

Former astronaut Russell L. "Rusty" Schweickart has been named Assistant for Payload Operations at NASA Headquarters.

In making the announcement earlier this month, Associate Administrator John E. Naugle said Schweickart will report to the Assistant Administrator for Planning and Program Integration.

Since May, 1974, Schweickart has been Director of User Affairs in

the Office of Applications at headquarters.

In the new position, Schweickart's primary responsibility is "to assist in the formulation of policy and plans for payload operations," Naugle said.

"His combination of first-hand awareness of user needs and desires and personal familiarity with manned space flight operations makes him uniquely qualified to contribute to this critical area in a

way which will help assure the effective use of man and flight systems to support the requirements of Shuttle and Spacelab users," Naugle said.

Schweickart came to NASA in the third astronaut selection in 1963 and flew the first lunar module on Apollo 9 in March, 1969.

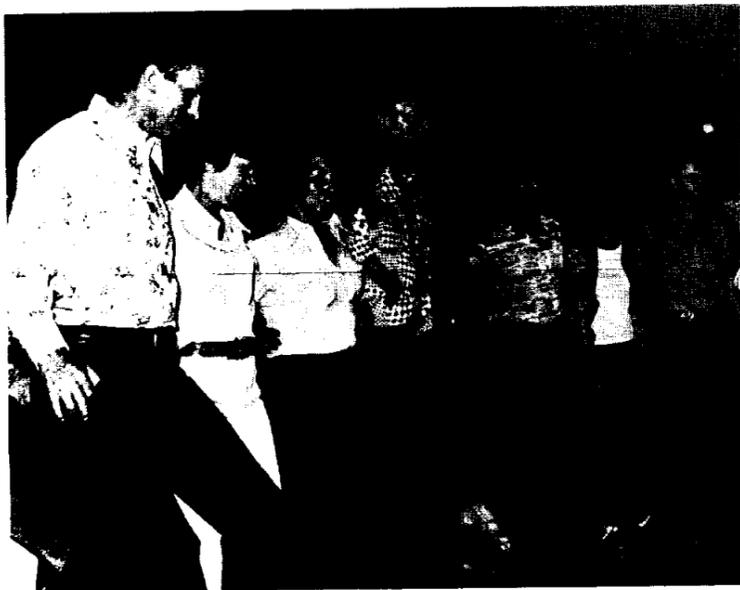
In 1973 he served as commander of the backup crew for the first Skylab mission.

Di-Jay chosen to negotiate shop contract

JSC has selected Di-Jay, Inc. of Seabrook for negotiation of a contract for central shop support services at the center.

Di-Jay will be responsible for management, supervision, services and materials to perform support services in aerospace electronic instrument fabrication, precision cleaning, and metal finishing support of the Technical Services Division central shop.

The cost-plus-fixed-fee contract begins Oct. 1, and runs through Sept. 30, 1977. It has an estimated value of \$451,000. Di-Jay will employ about 24 people for the contract.



WESTERN FUN — There's nothing to get even the most reluctant dancer into the action like a rousing "Cotton-Eyed Joe." These participants in the EAA Country Western Dance, Sept. 11, display their style, or lack of it, on the dance floor at the Gilruth Recreation Center. Those present really got into the swing of the music as the evening wore on.

EAA ATTRACTIONS

TICKETS AVAILABLE

The following tickets may be purchased at the Bldg. 11 Exchange Store from 10 a.m.-2 p.m., Mon-Fri.

JSC Picnic — Oct. 16, \$1 for general admission including rides, beverages and bus service, \$3 for admission plus meal.

Dean Goss Dinner Theater — comedy production *Love in E-Flat*, \$16/couple, Thur-Fri-Sun only through Oct. 4.

Houston Aeros Discount Gift Coupons — available soon for the regular season.

ABC Interstate Theaters — \$1.50.

Sea-Arama Marineworld — \$3.25/adults, \$2.25/children.

Houston Astros Gift Coupons — \$4/box seats, \$3.15/reserved seats.

Disney Magic Kingdom Club — free cards.

Six Flags Funseekers Club — free cards.

ASTROWORLD

Yes, Astroworld tickets are now available at the Bldg. 11 Exchange Store for \$1.50 off the regular prices. The tickets are good weekends through the end of the season, Nov. 28. Adult tickets may be purchased for \$6, children's for \$5. See you on the Texas Cyclone.

LAST CALL, SMOKERS

You have one week left to decide to try the 5-day plan to stop smoking. If you have not indicated your intention to participate but would like to, just bring \$7.50 to the Gilruth Recreation Center at 7 p.m. Monday, Oct. 3, and you're in.

FREE DANCE TONIGHT

The JSC Dance Club is sponsoring a free admission dance Friday, Sept. 24, from 8:30 p.m. to midnight at the Kemah Elks Lodge. Taped music will be played. All are

welcome to participate and meet dance club members. For information, contact Bill Simon, X-4027.

NEW DANCE CLASSES

New dance classes begin at the Recreation Center Oct. 13. The classes will meet every Wednesday night for 10 weeks. Cost is \$37 per couple and both JSC and contractor employees are eligible to participate. For information, contact Bill Simon, X-4027.

BASKETBALL

Basketball season will start about Nov. 1. Team captains should start getting their teams together.

Captains from last years teams will soon be receiving blank rosters, to be filled out and returned with the \$75 entry fee between Oct. 11-21. No entries will be accepted after 6 p.m., Oct. 21.

BELLY DANCING

An intermediate class for anyone who has completed a beginners course will commence on Oct. 5 and run through Nov. 4. It will meet on Tuesday and Thursday nights from 5-5:45 p.m. Cost is \$35 with a minimum of five people signing up.

A beginners class will meet the same dates from 5:45 till 6:45 p.m. Cost for this class is also \$35.

Both classes are scheduled for Rm 204. Sign-up at the recreation center from Sept. 27 through Oct. 1.



Roundup Swap-Shop

Swap Shop advertising is open to JSC federal and on-site contractor employees. Goods or services must be offered as advertised, without regard to race, religion, sex or national origin. Non-commercial personal ads should be 20 words or less, and include home telephone number. Typed or scribbled ad copy must be received by AP3/Roundup by Thursday of the week prior to publication.

FOUR-WHEELERS

68 Pontiac Bonneville. 4-dr, air, power, xint cond, 77K mi. \$1,200. Harlowe, 482-7987 or X-4739.

70 Toyota Corolla sta wgn. Xint cond, new radials, 4-spd, 26 mpg plus. \$650. 488-3293.

71 Merc Cougar XR7. AM-FM stereo, air, power, vinyl top, good cond. \$2,200. 481-4915 after 6.

72 Buick Skylark. 2-dr, air, power, auto, red w/white vinyl top, orig owner, xint cond. 946-9192.

74 Pinto hatchback. Vinyl top, air, auto, low mileage. 474-4808.

69 Chevy Chevelle 307. New eng, new paint, 3-on-floor, mag whls, lrg tires, new carpet, xint cond. Paul, 333-3291 evngs.

74 Datsun 710. 4-dr, auto, air, 13K mi. \$2,700 or offer. 334-1628 after 5.

76 Honda CVCC. Hatchback, 4-spd, air, AM-FM-cassette stereo, xint cond. \$3,600. 333-3721 after 5.

76 T-bird. Jade green, loaded. \$7,500. X-4258 or 481-6939 after 5.

73 Dodge Coronet Custom. 4-dr, air, power, NADA Aug trade in. Lockard, 488-8007.

63 Plym Vallant sta wgn. Body rusted but runs good, slant 6 eng, steel radials. \$225. Kilbourn, 482-7879 or X-4801.

71 Olds 88. 2-dr hardtop, vinyl top, air, power, 1 owner, good cond. 452-7224.

TWO-WHEELERS

75 Honda 750SS. Windjammer III fairing, mInt, 6500 mi. 488-3319.

Two 73 Honda XL250s. 4-stroke, mInt cond, low mileage, adult owner. \$650 each. 334-5080 after 5.

75 Honda Elsinore 250. Showroom cond, 5 hrs on bike. \$900. Jay, 488-8677.

71 Honda CL175. Recently overhauled eng. \$300. Schultz, 334-3046.

BOATS & PLANES

14-ft Aqua Cat fiberglass catamaran. Highlander trlr. \$750. Deiterich, 482-1859.

Fly tail-dragger! PA-16 Piper Clipper. 108LYC, 575SMOH, 300 NAVCOM. \$5,000 Nuss. X-3071 or 332-5892 after 5.

PROPERTY & RENTALS

2 bdrm, By-the-Sea Condominium apt. Fully furn kitchen, linens, color TV. \$200/wk. Clements, 474-2622.

Golfcourse lot. World of Resorts, Class A development on Lake Travis near Austin, fairly priced, equity plus paymts. Jacobs, 777-2173 or X-3561.

HOUSEHOLD ARTICLES

Singer Delux Zigzag Touch & Sew Mach. Model 758 w/carry case, fashion

and flexi-stitch deco discs. 4 yrs old. \$225. 534-2021.

Solid maple, twin, spindle bed frame. \$35. 488-1366.

Pair beautiful mahog lamp tables, 2-drw one shelf glass top, \$150/pr. Also antique wicker table, xint cond, \$125. 488-5564.

Stereo hi-fi w/AM-FM radio, \$110. B&W TV, \$50. Costanzo, 629-1478 or X-6101.

MUSICAL INSTRUMENTS

Baldwin Acrosonic Console. Mahog case, good cond. \$600. Eggleston, 334-2897.

Olds Ambassador trumpet. Good cond. \$125. 488-4467 after 5.

CAMERAS

Canon FTbn black-body 35mm SLR. 50mm f1.4 lens and case, Vivitar 135 mm f2.8 telephoto lens, Vivitar 253 auto flash. Xint cond. \$285. 488-1601.

Minoita SR-7 and SRT-101. Additional top qual equipmt, lenses, etc. Lost Interest, very reasonable. 337-3446.

Konica T3 w/f1.4 lens, new. \$250. Costanzo, 629-1478 or X-6101.

MISCELLANEOUS

AKC Irish Setter pups, wormed. \$50 each. Sharon, X-4086 or 925-2291, after

6 and wkends.

Size 5-7 Jr. clothes (some handmade). Also antiques, mirror \$35; Piano, \$75; organ, \$200. Foster, 337-2888 or X-5458.

1974 World Book Encyc, delux edit. Xint cond, yearbooks incl. \$225. Kilbourn, 482-7879 or X-4801.

Camper top for LWB pickup w/rack on top. Good cond. \$125. 482-7546.

Swingset. 6 place galvanized, playgrnd qual, 9-1/2 ft high. \$300 value, \$150. Horsman, 333-2185.

Golf clubs No. 1, 2, 3 wood. \$10. 482-7905.

Ballet bar. 5 ft, metal, portable, like new. \$25. 333-2185.

WANTED

Two Okla-Texas football tickets. Will purchase or trade for two tickets to any other Texas home game. Edwards, X-2141.

Will trade Berretta AL2 zogage, xint cond, for Remington 1100, 20 or 12 gauge. Windler, 482-7184.

Want barrels for 12-gauge Remington 1100, 30" full choke, 26" improved and 28" modified. Either plain or VR. Windler, 482-7184.

Ski cloths for children, sizes 8-16. Schultz, 334-3046.

Someone to join existing carpool from Meyerland Shop Cntr. 7:30-4:00. Joan, X-2928.

Small dog house in good cond. Andrea, X-4441 or 334-2129 after 5.

Dress form. Rubber foam, junior size. Also Singer Sew Mach Model 400A. Mary, X-4311 or 471-4062 after 5.

LATE ENTRIES

73 Honda SL350K2 dirt/street bike. \$450. Bullock, 488-6095.

Brittany spaniel pups. Gun dogs, AKC, good pedigree, wormed and shots. \$85. X-4604.

Swimming pool cover. 20 X 40 ft. \$35. Tree leaf vacuum cleaner. \$35. 488-1326 after 5.

73 Builaco 125cc Pursang. Works shocks, new bore and piston, runs strong. \$325. 482-3100 after 5.

Leaner bar and pad for Honda 550/750. \$15. 482-3100 after 5.

Black & Decker 18" Mower. Used 5 times. \$35 w/stock wheels. \$45 w/ball bearing steel wheels. 482-3100 after 5.

WANTED: Austin Healy Sprite rear bumper to fit '68 model. 482-3100 after 5.

Wicker table. Turn of the century, perfect cond, \$125. Also 2 mahog lamp tables with glass tops, \$150 pr. 488-5564.

74 Winnebago motorhome for rent. \$140/wk, \$22/day, 9 cents/mi. 488-2329.

Upright freezer, Frigidaire. \$60. 488-5230 after 5:30.

Mexican dancers liven Hispanic program

The Ballet Folklórico, folk dancers from Mexico, highlighted the Hispanic Heritage Week observance held here Sept. 14. Pictured, clockwise: Television newsman Frank Agraz, who acted as master of ceremonies; a lively Mexican polka; the entire troupe doing a dance from Vera Cruz; elaborate headdresses recall Mexico's Indian heritage. Three guest speakers also addressed the audience on the theme, "Hispanic Heritage: Past, Present and Future."



Lowering costs hasten day of home computer

Non-scientist newcomers to the NASA scene must often feel like Rip Van Winkle.

There is the sensation of waking from the past when one becomes more aware of the great changes that have taken place around the agency and in the scientific community.

Even a seemingly well-informed "outsider" would find it difficult to keep up with the technological advancements that are made constantly. Consider the computer.

The thought of owning a computer must seem as unreal to most people as their dreams of getting 50-yard line seats at the Super Bowl.

But what may have been a fantasy a few years or months ago is reality today to Gunter R. Sabionski and fellow members of the NASA-JSC Computer Hobbyist Club.

Sabionski is vice president, treasurer and education chairman for the club. He is also chief of the Avionics Analysis Section, Spacecraft Software Division.

And, like a growing number of people in the JSC and greater Houston area, Sabionski owns his micro-computer.

It sits on a folding card table beside the piano in a corner of what used to be the formal living room of his home.

The computer is not large, consisting of a cassette tape recorder, a small portable TV set, two metal consoles somewhat larger than

breadboxes and a keyboard similar to that on an electric typewriter.

Even more surprisingly, the system is becoming affordable. Someone who knew how to construct it could duplicate Sabionski's computer with its 18,000 words of memory for less than \$1,000, he said. Trainer systems are being marketed for about \$100.

Quality and speed are improving constantly and costs continue to drop on computer components, he noted.

For example, Sabionski said he

was at a conference about a year and a half ago and won the door prize — a micro-processor "chip" worth \$360 at the time. The same chip sells today for less than \$30.

While building a computer system is still too complex a task for the average person, the lowering costs seem to foretell a day in the not-too-distant future when each of us can have a ready-built computer in our homes.

Although operating the equipment may seem complicated, Sabionski's 7-year-old daughter,

Kimberly, is learning to play games on her father's computer.

One of the many games he has programmed is called "High, Low." The computer picks a number and Kimberly tries to guess what it is. The computer tells her if she has guessed high or low.

Sabionski has recently begun experimenting with music composition and music reproduction by computer. "It's really very complicated. I'm just in the learning process," he said.

In addition to the entertainment

potential of a home micro-computer, Sabionski points out that they can be used for such practical tasks as keeping bank records, figuring income tax or monitoring burglar and fire alarm systems.

Anyone interested in seeing some micro-computers demonstrated can attend the Computer Hobbyist Club's free demonstration Saturday, Sept. 25, in the atrium of the Bayou Building at the University of Houston at Clear Lake City.

About 20 systems will be on display there from 10 a.m. to 4 p.m.



COMPUTER HOBBYIST — Gunter R. Sabionski, above, is vice president of the NASA-JSC Computer Hobbyist Club and is one of a growing number of people around JSC who have their own home computers. At right, Sabionski's 7-year-old daughter, Kimberly, fingers the keyboard of her father's micro-computer. On the video screen is "Life," a dot pattern which "grows" or "dies" like an organism, forming unusual patterns.

